

## Manual valves AKT

### TECHNICAL INFORMATION

- Any installation position
- Low torque design for ease of action by means of Teflon seals
- AKT..R, AKT..F: EC type-tested and certified



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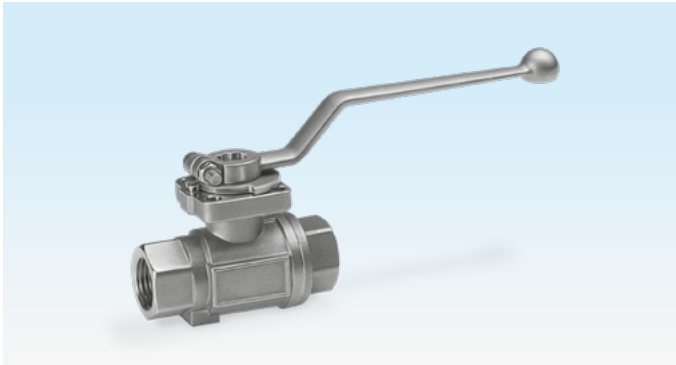
# 1 Application



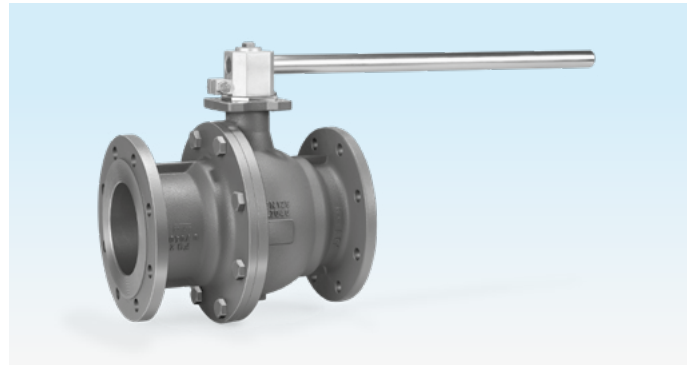
AKT 6 – 50R50B



AKT 25 – 100F160G

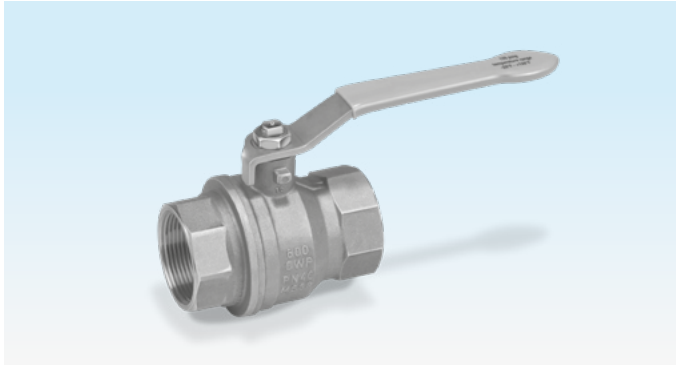


AKT 15 – 50R160S, AKT 15 – 50R160M



AKT 125 – 250/200F160G1

## 1 Application

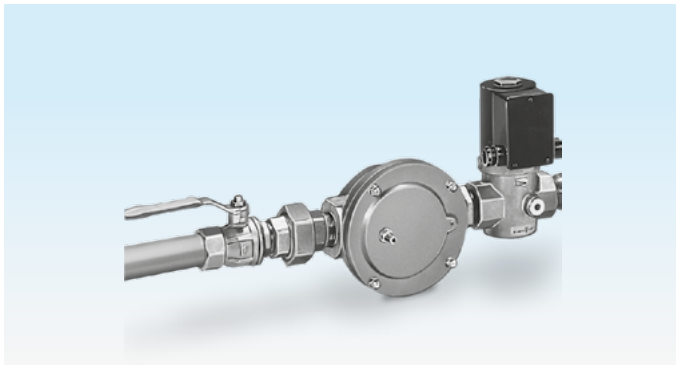


AKT 10 – 50TN88

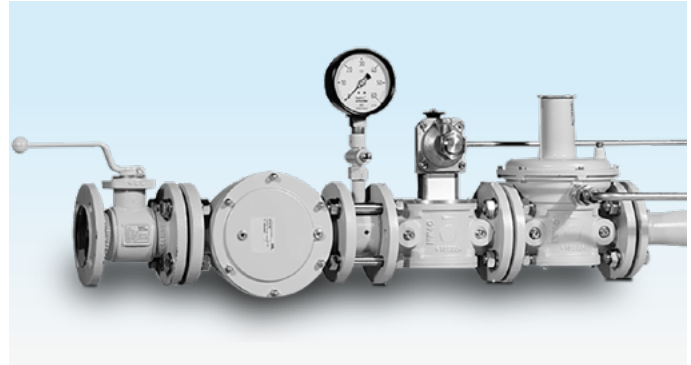
For isolation of light and heavy fuel oil, water and all gases to DVGW Code of Practice G 260/1 and air.

AKT..R with internal thread, AKT..F with flange and AKT..T with NPT thread.

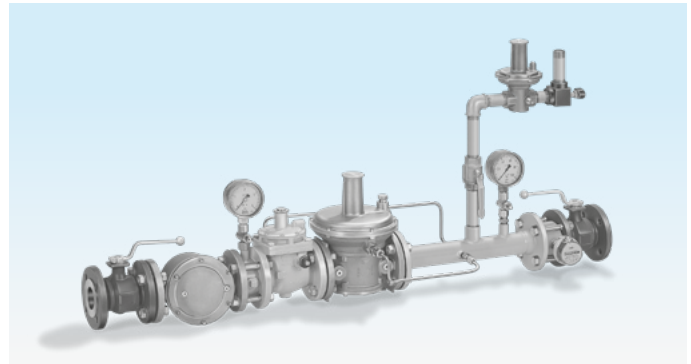
### 1.1 Application examples



Central flame protection  $\leq$  DN 50



Central flame protection  $\geq$  DN 50



Gas control line  $p_U \leq 4$  bar

## 2 Certification

### 2.1 Certificate download

Certificates – see [www.docuthek.com](http://www.docuthek.com)

### 2.2 EU certified



#### AKT..R50B

- (EU) 305/2011 – Construction Products Regulation
- (EU) 2016/426 (GAR) – Gas Appliances Regulation
- DIN EN 331

#### AKT 15–50R160S/M

- (EU) 2016/426 (GAR) – Gas Appliances Regulation
- DIN EN 13774, DVGW VP 303

#### AKT 25–100F160G

- 2014/68/EU – Pressure Equipment Directive (AKT 65–150F160G)
- (EU) 2016/426 (GAR) – Gas Appliances Regulation
- DIN EN 13774

#### AKT 25–100F160G, AKT 125–250/200F160G1

- 2014/68/EU – Pressure Equipment Directive (AKT 65–150F160G, AKT 125–250/200F160G1)
- (EU) 2016/426 (GAR) – Gas Appliances Regulation
- DIN EN 13774

### Approvals for manual valves

Type	Gas Appliances Regulation	DVGW test mark
AKT 650R50B	CE-0085AU0271	NG-4312AU0247
AKT 15–50R160S	CE-0085BQ0576	DG-4313BQ0568
AKT 15–50R160M	CE-0085BQ0576	DG-4313BQ0568
AKT 25–100F160G	CE-0085AT0438	NG-4313AT2770
AKT 125–250/200F160G1	CE-0085BN0275	NG-4313BN0274

### Declaration of performance pursuant to Annex III of Regulation (EU) No. 305/2011

Elster GmbH Strotheweg 1 49504 Lotte (Büren) Germany	
2015	
DIN EN 331 Manual valve AKT (DN)R50B Manual valve for gas installations Fuel gases pursuant to G260 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> gas families pursuant to EN 437 DIN-DVGW NG-4312AU0247	
Features:	DIN EN 331
Pressure class:	MOP 5 bar
Temperature class:	-20°C to +60°C
Rated flow rate:	passed
Dimensional tolerances:	passed
Tightness test:	≤ 20 cm³/h
Mechanical strength:	passed
Operating torque:	passed
Strength of stops:	passed
Endurance:	passed

## **2.3 Eurasian Customs Union**

The logo of the Eurasian Customs Union (EAC) is displayed in a bold, black, sans-serif font. It consists of the letters 'EAC' in a stylized, slightly condensed typeface, centered within a light gray rectangular background.

The products AKT meet the technical specifications of the Eurasian Customs Union.

## 3 Selection

### 3.1 ProFi

A web app selecting the correct product is available at [www.adlatus.org](http://www.adlatus.org).

### 3.2 Selection table for AKT..R with Rp internal thread, AKT..F with flange to ISO 7005

Description	Code	AKT..R50	AKT..R160	AKT..F160	Condition
Manual valve	<b>AKT</b>	•	•	•	
DN	<b>6-205/200</b>	6, 10, 15, 20, 25, 32, 40, 50	15, 20, 25, 32, 40, 50	25, 32, 40, 50, 65, 80, <b>100</b> , 125, 150, 200, 250/200	
<b>Pipe connection</b>					
Rp internal thread	<b>R</b>	•	•		
Flange to ISO 7005	<b>F</b>			•	
<b>Inlet pressure</b>					
p <sub>u</sub> max. 5 bar	<b>50</b>	•			
p <sub>u</sub> max. 16 bar	<b>160</b>		•	•	
<b>Housing</b>					
Brass	<b>B</b>	•			
Steel	<b>S</b>		•		
Stainless steel, suitable for biogas	<b>M</b>		•		
GJS 400-18-LT, 5.3103, ball: cast steel 1.0503, chromium-plated	<b>G</b>			•	DN 25-100 only
Two-part, GJS 400-18-LT, 5.3103, ball: cast steel 1.0503, chromium-plated	<b>G1</b>			•	DN 125-205/200 only
Short length	<b>K</b>			•	DN 25 only

### Order example

**AKT 100F160G**

### 3.3 Selection table for AKT..T with NPT thread, $p_u$ max. 8.8 bar (125 psig)

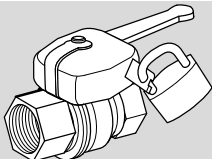
Description	Code	AKT
Manual valve	<b>AKT</b>	•
DN	<b>10-50</b>	10, 15, 20, 25, 32, 40, 50
T-product	<b>T</b>	•
<b>Pipe connection</b>		
NPT internal thread	<b>N</b>	•
<b>Inlet pressure</b>		
$p_u$ max. 8.8 bar (125 psig)	<b>88</b>	•



## 4 Accessories

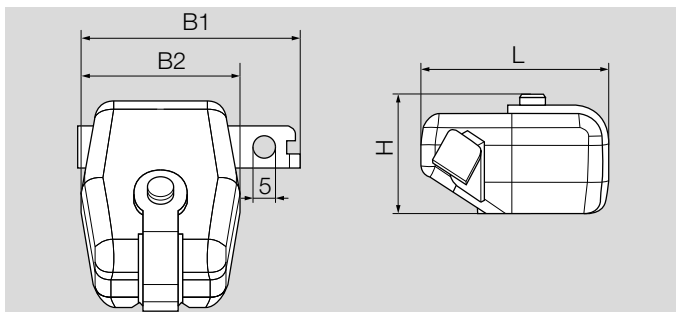
### 4.1 Locking device ASV

Suitable for manual valve AKT..R50B made of brass.



The locking device ASV can be fitted without the need for tools. For this purpose, no changes are to be made to the manual valve. It can be locked in the open or closed position using a padlock (not included in the delivery).

#### Dimensions



	DN AKT	B1	B2	L	H	Order no.
ASV 6/10	6/10	48	34	25	42	03151181
ASV 15/20	15/20	48	35	40	49	03151182
ASV 25/32	25/32	49	40	34	48	03151183
ASV 40/50	40/50	57	49	40	58	03151184

## 5 Technical data

### 5.1 AKT..R, AKT..F

Media: all gases to DVGW Code of Practice G 260/I and air.

#### AKT 6–50R50B

With internal thread to DIN EN 10226-1.

Inlet pressure  $p_U^{(2)}$ :

$p_U$  max. for gas: 5 bar,

$p_U$  max. for other media: 16 bar.

Temperature range:

for gas: -20 to +60°C,

other media<sup>1)</sup>: -20 to +180°C.

High temperature resistance (HTR): Class B 0.1 (100 mbar).

Housing: CW617N, chromium-plated.

Ball: CW617N, chromium-plated.

Ball seal: PTFE (Teflon).

Stem: brass, nickel-plated.

Stem seal:

1 Viton O-ring (gas approval),

1 NBR O-ring (gas and drinking water approval).

#### AKT 15–50R160S, AKT 15–50R160M

With internal thread to DIN EN 10226-1.

Inlet pressure  $p_U^{(2)}$ :

$p_U$  max. for gas: 16 bar,

$p_U$  max. for other media: 16 bar.

Temperature range:

for gas: -20 to +60°C,

other media<sup>1)</sup>: -20 to +180°C.

AKT...S housing: cast steel 1.0619, galvanized.

AKT...M housing: stainless steel 1.4408.

Ball: stainless steel 1.4408.

Ball seal: PTFE (Teflon).

Stem: stainless steel 1.4401.

Stem seal: PTFE/Viton.

#### AKT 25–100F160G

Flanged connection to EN 1092-2, PN 16.

Inlet pressure  $p_U$  max.: 16 bar.

Temperature range:

for gas: -20 to +60°C,

other media<sup>1)</sup>: -20 to +180°C.

Housing: GJS 400-18-LT, 5.3103.

Ball: cast steel 1.0503, chromium-plated.

Ball seal: PTFE (Teflon).

Stem: stainless steel 1.4104.

Stem seal: FKM (Viton).

Housing flange seal: Viton.

Up to 16 bar, this series meets the requirements for high thermal capacity (HTR up to 650°C) as well as for internal and external tightness pursuant to DIN EN 1775:2007, Annex A, Procedure B. At inlet pressures > 5 bar, use heat-resistant screws and an HTR flange seal on the inlet side.

#### AKT 125–250/200F160G1

AKT 250/200F160G1: with bore reduced to DN 200.

Flanged connection to EN 1092-2, PN 16.

Inlet pressure  $p_U$  max.: 16 bar.

Temperature range:

for gas: -20 to +60°C,

other media<sup>1)</sup>: -20 to +180°C.

## 5 Technical data

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Two-part housing: GJS 400-18-LT, 5.3103.

Ball: cast steel 1.0503, chromium-plated.

Ball seal: PTFE (Teflon).

Stem: stainless steel.

Stem seal: 2 × Viton.

Housing flange seal: Perbunan.

*1) Dependent on operating pressure and medium.*

*2) Some application standards (e.g. EN 746-2) limit the pressure range for threaded joints, depending on the nominal diameter.*

### 5.2 AKT..T

Media: all gases to DVGW Code of Practice G 260/I and air.

#### AKT..T

With NPT internal thread.

Inlet pressure  $p_u$  max.: 8.8 bar (125 psig).

Temperature range:

for gas: -20 to +60°C (-4 to +140°F),

other media: -20 to +180°C (-4 to +350°F).

Housing: brass.

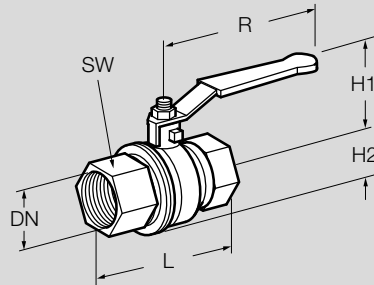
Ball: brass, chromium-plated.

Ball seal: PTFE (Teflon).

Stem seal: Viton.

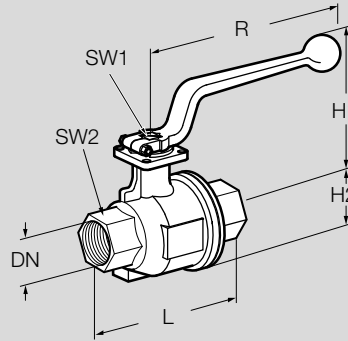
## 5.3 Dimensions

## 5.3.1 AKT 6–50R50B



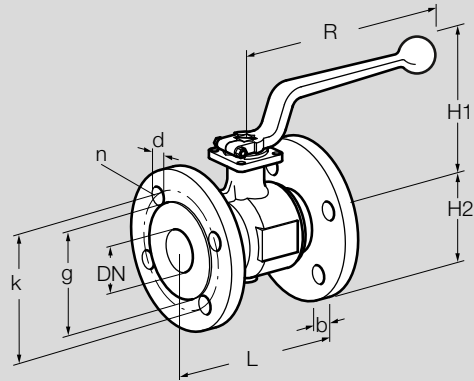
Type	DN	Connection	Dimensions [mm]					Weight kg
			L	H1	H2	R	SW	
AKT 6R50B	6	Rp 1/4	50	38	13	82	20	0.16
AKT 10R50B	10	Rp 3/8	60	38	13	82	20	0.15
AKT 15R50B	15	Rp 1/2	75	43	16	100	25	0.25
AKT 20R50B	20	Rp 3/4	80	50	19	120	32	0.39
AKT 25R50B	25	Rp 1	90	54	25	120	41	0.62
AKT 32R50B	32	Rp 1 1/4	110	73	30	160	50	0.98
AKT 40R50B	40	Rp 1 1/2	120	79	36	160	55	1.20
AKT 50R50B	50	Rp 2	140	86	43	160	70	2.00

5.3.2 AKT 15–50R160S, AKT 15–50R160M



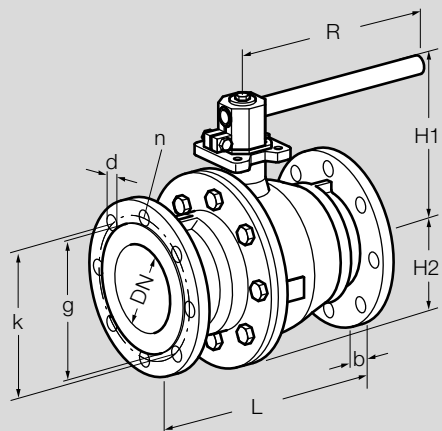
Type	DN	Connection	Dimensions [mm]						Weight kg
			L	H1	H2	R	SW1	SW2	
AKT 15R160S, AKT 15R160M	15	Rp 1/2	75	69.5	18	130	9	27	0.50
AKT 20R160S, AKT 20R160M	20	Rp 3/4	80	73.0	23	130	9	32	0.625
AKT 25R160S, AKT 25R160M	25	Rp 1	90	102.0	28	167	11	41	1.18
AKT 32R160S, AKT 32R160M	32	Rp 1 1/4	110	108.0	34	167	11	50	1.68
AKT 40R160S, AKT 40R160M	40	Rp 1 1/2	120	124.0	40	188	14	55	2.355
AKT 50R160S, AKT 50R160M	50	Rp 2	140	132.0	48	188	14	70	3.73

## 5.3.3 AKT 25 – 100F160C



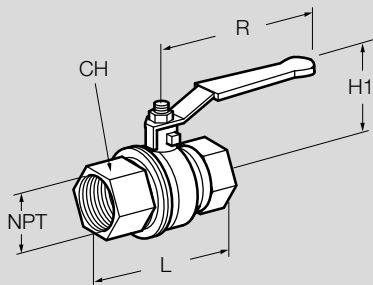
Type	DN	Dimensions [mm]									Weight kg
		L	k	g	b	n	d	H1	H2	R	
AKT 25F160GK	25	125	85	70	18	4	14	83	58	158	4.20
AKT 32F160G	32	130	100	80	18	4	18	102	70	180	5.60
AKT 40F160G	40	140	110	89	18	4	18	107	76	180	7.50
AKT 50F160G	50	150	125	103	20	4	18	117	83	222	9.80
AKT 65F160G	65	170	145	123	20	4	18	137	93	293	14.60
AKT 80F160G	80	180	160	140	20	8	18	149	100	293	19.80
AKT 100F160G	100	190	180	158	20	8	18	163	110	293	27.20

## 5.3.4 AKT 125–250/200F160G1



Type	DN	Dimensions [mm]									Weight kg
		L	k	g	b	n	d	H1	H2	R	
AKT 125F160G1	125	325	210	188	26	8	18	245	138	565	34.90
AKT 150F160G1	150	350	240	212	26	8	22	268	168	565	52.00
AKT 200F160G1	200	400	295	268	30	12	22	316	208	715	89.00
AKT 250/200F160G1	250	450	355	320	30	12	26	301	210	715	125.00

## 5.3.5 AKT 10–50TN88



Type	DN	Connection	Dimensions								Weight	
			L		H1		R		CH		kg	lbs
			mm	inch	mm	inch	mm	inch	mm	inch		
AKT 10TN88	10	3/8" NPT	45.0	1.77	1.50	38.1	82.0	3.23	20.0	0.79	0.124	0.27
AKT 15TN88	15	1/2" NPT	59.0	2.32	1.69	42.9	100.0	3.94	24.9	0.98	0.224	0.49
AKT 20TN88	20	3/4" NPT	64.0	2.52	1.97	50.0	119.9	4.72	31.0	1.22	0.352	0.78
AKT 25TN88	25	1" NPT	81.0	3.19	2.13	54.1	119.9	4.72	39.9	1.57	0.604	1.33
AKT 32TN88	32	1 1/4" NPT	93.0	3.66	2.87	72.9	158.0	6.22	49.0	1.93	0.908	2.00
AKT 40TN88	40	1 1/2" NPT	102.1	4.02	3.11	79.0	158.0	6.22	54.1	2.13	1.105	2.44
AKT 50TN88	50	2" NPT	120.9	4.76	3.39	86.1	158.0	6.22	68.6	2.70	1.820	4.01



## For more information

The Honeywell Thermal Solutions family of products includes Honeywell Combustion Safety, Eclipse, Exothermics, Hauck, Kromschroder and Maxon. To learn more about our products, visit [ThermalSolutions.honeywell.com](https://ThermalSolutions.honeywell.com) or contact your Honeywell Sales Engineer.

Elster GmbH  
Strotheweg 1, D-49504 Lotte  
T +49 541 1214-0  
[hts.lotte@honeywell.com](mailto:hts.lotte@honeywell.com)  
[www.kromschroeder.com](http://www.kromschroeder.com)

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